

Crystal Data: Hexagonal. *Point Group:* 3m. As elongated platy crystals to 5 mm or as irregular grains to 3 mm.

Physical Properties: *Cleavage:* Good on {101̄ 0}; poor parting on {0001}. *Tenacity:* Brittle. *Fracture:* n.d. Hardness = 5 D(meas.) = 2.43(1) D(calc.) = 2.45

Optical Properties: Translucent. *Color:* Deep yellow; in thin section, yellow. *Streak:* n.d.

Luster: Vitreous.

Optical Class: Uniaxial (+). $\omega = 1.660$ $\varepsilon = 1.584$ *Pleochroism:* Deep yellow to colorless.

Absorption: O > E. *Orientation:* Negative elongation.

Cell Data: *Space Group:* P31c. $a = 12.8257(6)$ $c = 10.6907(6)$ Z = 2

X-ray Powder Pattern: Malaya Bystraya lazurite deposit, Eastern Siberian Region, Russia. 3.712 (100), 3.307 (50), 3.915 (38), 4.821 (32), 2.673 (30), 2.692 (22), 2.782 (18)

Chemistry:	(1)
SiO ₂	32.9
Al ₂ O ₃	27.2
CaO	5.1
Na ₂ O	19.5
K ₂ O	0.18
S	14.7
Cl	2.79
- O = S	1.38
- O = Cl	0.63
Total	99.46

(1) Malaya Bystraya lazurite deposit, Eastern Siberian Region, Russia; average of 12 electron microprobe analyses supplemented by FTIR spectroscopy; corresponds to $\text{Na}_{7.03}\text{K}_{0.04}\text{Ca}_{1.01}[\text{Al}_{6.04}\text{Si}_{5.96}\text{O}_{24}](\text{S}_5)^{2-0.94}[\text{Cl}^{-0.88}(\text{SH})^{-0.12}]$.

Mineral Group: Cancrinite group.

Occurrence: As metasomatic lenses in dolomitic marble.

Association: Lazurite, diopside, calcite, pyrite.

Distribution: Found at the Malaya Bystraya lazurite deposit, ~6 km above the confluence of Malaya Bystraya river and Lazurnyi creek, ~25 km from Sludyanka, near Lake Baikal, Eastern Siberian Region, Russia.

Name: Presumably for the occurrence in the Malaya Bystraya deposit, Russia.

Type Material: A.E. Fersman Mineralogical Museum, Academy of Sciences, Moscow, Russia.

References: (1) Ivanov, V.G. and A.N. Sapozhnikov (1985) Lazurites of the USSR. Nauka, Novosibirsk, 1-172 (in Russian). (2) Sapozhnikov, A.N., V.G. Ivanov, L.F. Piskunova, A.A. Kashaev, L.E. Terentieva, and E.A. Pobedimskaya (1991) Bystrite $\text{Ca}(\text{Na},\text{K})_7(\text{Si}_6\text{Al}_6\text{O}_{24})(\text{S}_3)_{1.5}\bullet\text{H}_2\text{O}$ - a new cancrinite-like mineral. Zap. Vses. Mineral. Obshch., 120(3), 97-100 (in Russian). (3) Pobedimskaya, E.A., L.E. Terentieva, A.N. Sapozhnikov, A.A. Kashaev, and G.I. Dorokhova (1991) Crystal structure of bystrite. Doklady Acad. Nauk SSSR, 319, 873-878 (in Russian). (4) (1993) Amer. Mineral., 78, 450 (abs. refs. 1, 2 and 3). (5) Sapozhnikov, A.N., E.V. Kaneva, L.F. Suvorova, V.I. Levitsky, and L.A. Ivanova (2017) Sulfhydrylbystrite, $\text{Na}_5\text{K}_2\text{Ca}(\text{Al}_6\text{Si}_6\text{O}_{24})(\text{S}_5)(\text{SH})$, a new mineral with the LOS framework, and re-interpretation of bystrite: cancrinite-group minerals with novel extra-framework anions. Mineral. Mag., 81(2), 383-402. (6) (2017) Amer. Mineral., 102, 2345-2346 (abs. ref. 5).